

In the Claims:

1 1. (currently amended) A method of resin-encapsulating an
2 electronic component mounted on a main surface of a board,
3 using a mold pair having an upper mold and a lower mold,
4 comprising the steps of:

5 attaching said board on said upper mold;

6 generating melted resin in a cavity provided in said
7 ~~lower ; mold~~ lower mold solely by melting a solid resin
8 material in said cavity;

9 immersing said electronic component in said melted
10 resin in said cavity by closing said mold pair; and

11 forming a resin molded product including said
12 electronic component encapsulated in a set resin by setting
13 said melted resin in said cavity to produce said set resin
14 only from said melted resin that was generated from said
15 solid resin material in said cavity.

1 2. (previously presented) The method of resin encapsulation
2 according to claim 1, further comprising, before said step
3 of generating melted resin, another step of placing said
4 solid resin material in said cavity.

1 3. (original) The method of resin encapsulation according to
2 claim 1, wherein

3 an electrode of said board and an electrode of said
4 electronic component are connected by a conductive material
5 forming a loop in a prescribed plane; and

6 in said step of immersing said electronic component in
7 said melted resin, said prescribed plane moves
8 substantially vertically to a main surface of said melted
9 resin.

1 4. (original) A method of manufacturing a semiconductor
2 device, using the method of resin encapsulation according
3 to claim 1.

1 5. (currently amended) A method of resin-encapsulating an
2 electronic component mounted on a main surface of a board,
3 using a mold pair having an upper mold and a lower mold and
4 a solid resin material for resin encapsulation, comprising
5 the steps of:

6 placing said board on said lower mold;

7 placing said solid resin material on a main surface of
8 said board such that said solid resin material is not in
9 contact with a conductive material connecting an electrode
10 of said board with an electrode of said electronic
11 component;

12 closing said mold ~~[[pair]]~~ pair to form a mold cavity
13 between said upper and lower molds;

14 generating melted resin on the main surface of said
15 board and enclosing said electronic component in said
16 melted resin only by heating and melting only said solid
17 resin material; material in said mold cavity; and

18 forming a resin mold product by setting only said
19 melted ~~[[resin-]]~~ resin that was generated from said solid
20 resin material in said mold cavity.

1 6. (currently amended) The method of resin encapsulation
2 according to claim 5, wherein

3 said solid resin material has such a size and a shape
4 that correspond to a size and a shape of said cavity; and
5 said melted resin is generated by heat transmitted
6 from said upper mold to said solid resin material.

1 7. (currently amended) The method of resin encapsulation
2 according to claim 5, wherein

3 said solid resin material is formed such that a space
4 formed by said board and said solid resin material encloses
5 said electronic component, when said solid resin material
6 is placed on the main surface of said board; and

7 said space is set to have such a size that said solid
8 resin material is not in contact with the conductive
9 material connecting the electrode of said board with the
10 electrode of said electronic component.

1 8. (original) A method of manufacturing a semiconductor
2 device, using the method of resin encapsulation according
3 to claim 5.

1 9. (currently amended) A solid resin material consisting of a
2 solid resin material adapted, sized and shaped to be placed
3 in a mold cavity provided in a mold pair, and adapted to be
4 used as a raw material for being melted in said cavity to
5 produce thereof a melted resin in a method of
6 resin-encapsulating an electronic component mounted on a
7 main surface of a board in said cavity by encapsulating
8 said electronic component in only said melted resin and
9 setting only said melted resin in said cavity, wherein said
10 solid resin material has such a size and a shape that
11 correspond to a size and a shape of said ~~cavity~~, cavity,
12 and a volume of said melted resin produced only from said
13 solid resin material in said cavity entirely fills a
14 remaining space around said board and said electronic
15 component in said cavity and only said melted resin
16 encapsulates said electronic component.

1 10. (currently amended) The solid resin material according to
2 claim 9, adapted, sized and shaped such that a space formed
3 ~~[[by]]~~ between said board and said solid resin material
4 encloses said electronic component, when said solid resin
5 material is placed on the main surface of said board;
6 wherein said space is set to have such a size that said
7 solid resin material is not in contact with a conductive
8 material connecting an electrode of said board with an
9 electrode of said electronic component.

1 11. (currently amended) The solid resin material according to
2 claim 9, wherein a notch is formed in said solid resin
3 material.

1 12. (currently amended) The solid resin material according to
2 claim 9, being a solid plate consisting of said solid resin
3 material and having a stepped sectional shape with stepped
4 side walls.

1 13. (previously presented) The method of resin encapsulation
2 according to claim 1, wherein said step of placing said
3 solid resin material in said cavity comprises transporting
4 and depositing said solid resin material into said cavity
5 using a vacuum-holding conveyor.

[RESPONSE CONTINUES ON NEXT PAGE]